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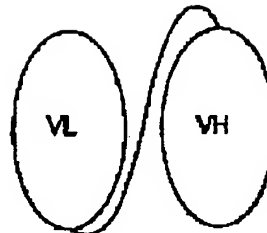
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TITLE : PRODUCTION OF SINGLE-STRAND FV
ANTIBODY



ABSTRACT : PROBLEM TO BE SOLVED: To obtain the subject antibody containing a part essential for binding to an antigen, useful for immunological diagnosis, separation, purification, etc., in good productivity by solubilizing a single-strand Fv antibody expressed as an inclusion body in Escherichia coil, and subsequently holding the solubilized antibody.

SOLUTION: This method for producing a single-strand Fv antibody comprises binding an antigen (e.g. T3) to bovine serum albumin (BSA), etc., immunizing a BALB/c mouse with the bound antigen, fusing the splenic cells of the mouse to myeloma cells in the presence of polyethylene glycol, etc., selectively culturing the fused cells in a HAT culture medium, cloning the cultured cells, extracting mRNA from the obtained hybridoma capable of producing an anti-T3 antibody, producing a cDNA from the mRNA by a conventional method, cloning the cDNA with a primer to select a DNA having the H chain V region VH and L chain V region VL of the anti-T3 antibody, inserting the DNA into a vector, transforming Escherichia coil with the plasmid, expressing the single-strand Fv antibody as an inclusion body in the Escherichia coil, modifying the obtained single-strand Fv antibody and subsequently holding the solubilized antibody. Thus, the objective single-strand Fv antibody to which VH and VL are bound through linkers is obtained in good productivity.

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